

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

7/4

Applicant: Yang-Do Choi et al.

Title: GENES FOR S-ADENOSYL L-METHIONINE:JASMONIC ACID
CARBOXYL METHYLTRANSFERASE AND A METHOD FOR THE
DEVELOPMENT OF PATHOGEN-AND STRESS-RESISTANT
PLANTS USING THE GENES

Appl. No.: 10/049,187

Filing Date: June 13, 2002

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56Commissioner for Patents
Box PATENT APPLICATION
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447.

Respectfully submitted,

Date June 13, 2002

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5143
Telephone: (202) 672-5404
Facsimile: (202) 672-5399

By _____

Stephen A. Bent
Attorney for Applicant
Registration No. 29,768

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: June 13, 2002 (use as many sheets as necessary)				Complete if Known	
		Application Number		10/049,187	
		Filing Date		June 13, 2002	
		First Named Inventor		Yang-Do Choi	
		Group Art Unit		Unassigned	
		Examiner Name		Unassigned	
		Attorney Docket Number		058333-0112	
Sheet	1	of	2		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A1	Creelman et al., "Biosynthesis and Action of Jasmonates in Plants", <i>Ann. Rev. Plant Physiol. Plant Mol. Biol.</i> , 48:355-381, 1992, Annual Reviews Inc.	
	A2	Glazebrook, "Genes Controlling Expression of Defense Responses in Arabidopsis", <i>Curr. Opin Plant Biol.</i> , 2:280-286, 1999, Elsevier Science Ltd.	
	A3	Uknes et al., "Acquired Resistance in Arabidopsis", <i>The Plant Cell</i> , 4:645-656, 1992, American Society of Plant Physiologists.	
	A4	Penninckx et al., "Pathogen Induced Systemic Activation of a Plant Defensin Gene in Arabidopsis Follows A Salicylic Acid-Independent Pathway", <i>The Plant Cell</i> , 8:2309-2323, 1996, American Society of Plant Physiologists.	
	A5	Cao et al., "Generation of Broad-Spectrum Disease Resistance by Overexpression of an Essential Regulatory Gene in Systemic Acquired Resistance", <i>Proc. Natl. Sci. USA</i> , 95:6531-6536, 1998, The National Academy of Sciences.	
	A6	Farmer et al., "Interplant Communication: Airborne Methyl Jasmonate Induces Synthesis of Proteinase Inhibitors in Plant Leaves", <i>Proc. Natl. Acad. Sci. USA</i> , 87:7713-7716, 1990, The National Academy of Sciences.	
	A7	Greenberg, et al., "Programmed Cell Death in Plants: A Pathogen-Triggered Response Activated Coordinately with Multiple Defense Functions", <i>Cell</i> , 77:551-563, 1994, Cell Press.	
	A8	Harms et al., "Expression of a Flax Allene Oxide Synthase cDNA Leads to Increased Endogenous Jasmonic Acid (JA) Levels in Transgenic Potato Plants but Not to a Corresponding Activation of JA-Responding Genes", <i>The Plant Cell</i> , 7:1645-1654, 1995, American Society of Plant Physiologists.	

Examiner Signature	Date Considered	
--------------------	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/049,187
Date Submitted: June 13, 2002		Filing Date	June 13, 2002
(use as many sheets as necessary)		First Named Inventor	Yang-Do Choi
		Group Art Unit	Unassigned
		Examiner Name	Unassigned
		Attorney Docket Number	058333-0112
Sheet	2	of	2

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	A9	Wang et al., "Overexpression of a Cytoplasm-Localized Allene Oxide Synthase Promotes the Wound-Induced Accumulation of Jasmonic Acid in Transgenic Tobacco", <i>Plant Mol. Biol.</i> , 40:783-793, 1999, Kluwer Academic Publishers.	
	A10	O'Donnell et al., "A Novel Tomato Gene that Rapidly Responds to Wound- and Pathogen-Related signals", <i>The Plant J.</i> , 14(1):137-142, 1998, Blackwell Science Ltd.	
	A11	Rakwal et al., "Separation of Proteins From Stressed Rice (<i>Oryza sativa</i> L.) Leaf Tissues by Two-Dimensional Polyacrylamide Gel Electrophoresis: Induction of Pathogenesis-Related and Cellular Protectant Proteins by Jasmonic Acids, UV Irradiation and Copper Chloride" <i>Electrophoresis</i> , 20(7):3472-3478, 1999, WILEY-VCH Verlag GmbH, 69451 Weinheim.	
	A12	Lee et al., "Jasmonate Signalling Can be Uncoupled from Abscissic Acid Signalling in Barley: Identification of Jasmonate-Regulated Transcripts Which Are Not Induced by Abscissic Acid", <i>Planta</i> , 199(4):625-632, 1996. Springer-Verlag.	
	A13	Tamogami et al., "Phytoalexin Production by Amino Acid Conjugates of Jasmonic Acid through Induction of Naringenin-7-O-Methyltransferase, A Key Enzyme On Phytoalexin Biosynthesis in Rice (<i>Oryza sativa</i> L.)", <i>FEBS Lett.</i> , 401:239-242, 1997, Federal of European Biochemical Societies.	
	A14	Rakwal et al., "role of Jasmonate in the Rice (<i>Oryza sativa</i> L.) Self-Defense Mechanism Using Proteome Analysis", <i>Electrophoresis</i> , 21(12):2492-2500, 2000, WILEY-VCH Verlag GmbH, 69451 Weinheim.	
	A15	Seo et al., "Jasmonic Acid Carboxyl Methyltransferase: A Key Enzyme for Jasmonate-Regulated Plant Responses", <i>Proc. Natl. Acad. Sci. USA</i> , 98(8):4788-4793, 2001.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

002.8441409
¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.